

Having thus set forth the nature of the invention, what is claimed herein is:

1. A cross cell sandwich core structure comprising:

a first and second faceplate spaced apart from one another and substantially parallel to one another;

a plurality of ribbons located between the first and second faceplates, the ribbons extending in height from a top surface of the first faceplate to a bottom surface of the second faceplate and extending in width substantially parallel to one another along a length of the first and second faceplates,

wherein each of the plurality of ribbons has at least one wall portion angled relative to the width of the respective ribbon, and said at least one wall portion is obliquely angled relative to a perpendicular axis extending through said first and second faceplates and the at least one wall portion.

2. The cross cell sandwich core structure of claim 1 wherein at least one of the ribbons has a cross section as taken along a plane parallel to the first faceplate forming a substantially square wave.

3. The cross cell sandwich core structure of claim 1 wherein at least one of the ribbons has a cross section as taken along a plane parallel to the first faceplate forming a substantially rectangular wave.

4. The cross cell sandwich core structure of claim 1 wherein at least one of the ribbons has a cross section as taken along a plane parallel to the first faceplate forming a substantially trapezoidal wave.

5. The cross cell sandwich core structure of claim 1 wherein at least one of the ribbons has a cross section as taken along a plane parallel to the first faceplate forming a substantially sinusoidal wave.

6. The cross cell sandwich core structure of claim 1 the plurality of ribbons are connected to the first faceplate.

7. The cross cell sandwich core structure of claim 6 wherein the plurality of ribbons are connected to the second faceplate.

8. The cross cell sandwich core structure of claim 1 wherein the first and second faceplates are planar.

9. A cross cell sandwich core structure comprising:

a first and second faceplate spaced apart from one another, said first and second faceplates substantially parallel to one another;

a plurality of walls located between the first and second faceplates, the walls extending in height from a top surface of the first faceplate to a bottom surface of the second faceplate; and

wherein a first wall of the plurality of walls is angled obliquely relative to a first perpendicular axis extending through the first and second faceplates.

10. The cross cell sandwich core structure of claim 9 further comprising a second wall of the plurality of walls is obliquely angled relative to a second perpendicular axis extending through the first and second faceplates.

11. The cross cell sandwich core structure of claim 10 wherein the first and second wall connect to one another.

12. The cross cell sandwich core structure of claim 11 wherein the first and second wall are angled at about ninety degrees relative to one another.

13. The cross cell sandwich core structure of claim 11 wherein the first and second wall are angled at about one hundred thirty five degrees relative to one another.

14. The cross cell sandwich core structure of claim 11 wherein the first and second walls comprise a portion of a first ribbon.

15. The cross cell sandwich core structure of claim 14 further comprising a second ribbon, said second ribbon having at least one wall angled obliquely relative to a third perpendicular axis extending through said first and second faceplates.

16. The cross cell sandwich core structure of claim 15 further comprising a plurality of alternating first and second ribbons.

17. The cross cell sandwich core structure of claim 16 wherein the wall is a portion of a first ribbon and a cross section of the first ribbon as taken parallel to the first faceplate is a sinusoidal wave.